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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/720,280 | 12/21/2000 | Thomas Eckel | MO-6035/LEA- | 1062 |

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| EXAMINER |
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HOKE, VERONICA P

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| ART UNIT | PAPER NUMBER |
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1714

DATE MAILED: 01/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/702,280

Applicant(s)
ECKEL ET AL

Examiner
VERONICA HOKE

Art Unit
1714



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20, and 22 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 20, and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 & 4 20) ☐ Other:

Art Unit: 1714

All of the references that were either cited and / or applied in the corresponding application PCT /EP99/04059 , now WO 00/00541 published January 6, 2000, have been considered by the undersigned examiner and made of record in the instant application if not already listed in applicants' two proffered IDS received December 21, 2000 and March 12, 2001.

The preliminary amendment filed December 21, 2000 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murayama et al (EP 0728811) taken with Weil et al (US patent no. 4946885) and Bodiger et al. (US patent no. 5849827).

Murayama et al disclose blends of 40 - 90 parts PC to 1-60 parts of a graft styrene copolymer having a rubber base which has a Tg of less than 0° C (page 3), which composition is flameproofed with a phosphazene conforming to applicants depicted phosphazene oligomer having formulas 1a and 1b. These compositions may contain an inorganic filler such as talc or

Art Unit: 1714

other reinforcing materials such as carbon fiber. The instant claims' component "(E)" detonates an inorganic particulate materials having a particle size not exceeding 200 nanometers which is the equivalent of 0.20 micron. Applicants' representative species of metal- containing silicates (claim 14) is considered to encompass talc.

According to Weil et al inorganic particulate compounds such as talc have been used previously to promote the effectiveness of phosphazenes which are not organo- substituted as characterize Murayama's flame retardants . Weil's disclosure is in col.3 , line 18 through col.4, line 8. Similarly Bodiger relates inorganic particulate substances enhancing effect on P-containing flame retardants as a class albeit phosphazenes are not particularly mentioned. Such inorganic materials, include alternatively to talc, alumina or titanium dioxide (titania) at particle sizes less than 100 nanometers (0.10 micron) according to Bodiger. This reference's P -containing primary flame retardant is not limited to the disclosed phosphonic, phosphinic or phosphate classes mentioned as being benefited in their improved effectiveness by said finely divided particulate substance's presence.

There is no plausible reason to expect Murayama's organo substituted phosphazene flame retardant PC/Pstyrenic resin composition to not be similarly benefited by the inorganic particulate substance's presence. The absence of recognition by these references of applicants' increased stress-crack reduction observation does not proscribe this holding of obviousness since there is strong motivation to make the combination for the expected benefit in promoting burn reduction efficiency. The concomitantly conferred advantage of stress crack reduction does not tip

Art Unit: 1714

the scales in applicants' favor since such benefit is merely inherent in following these references' suggestion to add the inorganic substance within the same concentration range and preferably at a particle size diameter which is even less than that which applicants themselves suggest is tolerable.


VERONICA P. HOKE
PRIMARY EXAMINER

vph

January 9, 2002

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